

buds; and the young thus produced propagate after a certain time in the same manner. While they are adding to their number by propagation, they are also suffering loss by death and other causes. These animals are voracious, and readily seize and swallow univalve or bivalve mollusca, or a crustacean, as large or even larger than their own bodies, and after retaining them in the stomach, generally for more than twenty-four hours, they reject them. They also not unfrequently swallow one of their neighbours, and the retention in the stomach for some time terminates in the destruction and digestion of the inclosed animal. When they seize a molluscan too large to be swallowed, they retain it firmly embraced by the tentacula, and insert their elongated mouth into the interior of the shell; and in like manner they keep dead articulated animals, too large to be swallowed, in their tentacula for more than a day, and in all probability extract nourishment, by acting upon them with their elongated mouth.

The accidental delay in the publishing of the 'Transactions' of the Society for this month enables me to add, that up to this period (27th July) these animals have not yet divided into young *Medusæ*—that they have only just ceased to propagate by buds and stolons—that they appear to be perfectly healthy—and that on the 11th instant a number of fresh specimens were obtained from the sea, adhering to the lower surface of two stones, near the place where the others were found last September.—*From the Transactions of the Literary and Philosophical Society, St. Andrews.*

New species of Mammalia. By J. E. GRAY, F.R.S.

Herpestes semitorquatus. Dark brown, yellow grised; sides and beneath rufous; feet blacker; tail paler; lips thin; throat and lower part of the side of the neck rufous, separated from the colour of the upper part of the neck by a well-defined straight line; fur rather rigid, with a fine brown undercoat; longer hair of the back dark brown, with a broad reddish yellow subterminal band; of the sides bright red-bay; of tail pale yellow, with a broad dark band and yellowish tip. Length: head and body 18·6; tail 11 inches.

Hab. Borneo. Sent to the British Museum by H. Lowe, Esq., in company with *Herpestes brachyurus*.

Felis Charltonii. This species is very like *Felis marmoratus*, but brighter and the dark spots rather differently disposed.

It comes from Darjeeling, in continental India.

It is curious to have two species so nearly allied from such different parts of Asia.

Pteromys punctatus. Bright bay; back ornamented with white spots.

Hab. Malacca.

This is the only species of the genus that has any white on its back. Its skull is much smaller than the other Asiatic *Pteromys*.

The two latter animals were presented to the Museum collection by Andrew Charlton, Esq., of Liskard, Cheshire, with a series of specimens of *Felis marmoratus* from Malacca.

White-thighed Jacchus, *Jacchus leucomerus*. Pale brown; hair pale, with a broad dark terminal band; hinder part of body and legs darker; face and tail black; throat and beneath paler; front edge of thighs and sides of loins white; ears not tufted.

Hab. Bolivia.

Brought to England by Mr. Bridges, and in the collection of the British Museum. This may be *J. melanura*, Geoff.

General Views on the Classification of Animals. By J. D. DANA*.

In Cuvier's classification of animals, the division Radiata includes all invertebrated animals not comprised in either of the subkingdoms Articulata and Mollusca. Consisting thus only of refuse species, and not limited by positive characters, as Owen states, we should not expect that the group could be a *natural* assemblage. No line of subdivision, however, has yet been made out which has met with general favour; yet greater precision has been given to our views of the affinities that run through the animal kingdom, by appealing to the nerves, the seat of sensibility and sentiment, as a basis in classification; and in this manner the subdivisions have been characterized as follows by Dr. Grant:—

I. The *Vertebrata*, having a brain and a spinal cord, constitute the SPINI-VERTEBRATA.

II. The *Mollusca*, having the nerves forming generally a transverse series of ganglia disposed around the œsophagus, the CYCLO-GANGLIATA.

III. The *Articulata*, having no proper brain, and the main cord which runs the length of the body, double, the DIPLO-NEURA.

IV. The *Radiata*, having a radiate structure in the body and the nervous ganglia arranged in a circle, CYCLO-NEURA.

An objection might be made to this system, on the ground of the apparent absence of nerves in some of the lower orders. But a real absence can hardly be concluded from our inability to distinguish them. Many of these animals show by their voluntary motions and sensibility that nervous influences traverse the body: moreover, nervous matter is secreted in lines. We can therefore only infer the indistinctness, and not the absence of nerves, from our ineffectual efforts to trace them out; and we must consequently be guided by general structure, in determining the relations of groups, when the nerves fail of giving aid.

The above arrangement fails, in some respects, of presenting a clear idea of the system in nature, although highly philosophical in its general features. A study of the animal kingdom, as has been lately shown, brings to light lines or general systems of development

* Proceed. Acad. Nat. Sci. Philad. ii. p. 281, Oct. 1845.